

EXHIBIT 5

Protected Information - Benjamin Lebwohl, M.D., M.S.

1 IN THE UNITED STATES DISTRICT COURT
2 FOR THE DISTRICT OF NEW JERSEY
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5

6 IN RE: BENICAR : Civil No.
7 (OLMESARTAN) PRODUCT : 15-2606 (RBK) (JS)
8 LIABILITY LITIGATION :
9 :
10 - - -

11 February 10, 2017
12 - - -

13 PROTECTED INFORMATION
14 - - -

15 Oral expert deposition of
16 BENJAMIN LEBWOHL, M.D., M.S., taken
17 pursuant to notice, was held at the law
18 offices of Robins Kaplan LLP, 601
19 Lexington Avenue, Suite 3400, New York,
20 New York, beginning at 9:45 a.m., on the
21 above date, before Kimberly A. Cahill, a
22 Federally Approved Registered Merit
23 Reporter and Notary Public.
24

21 - - -
22 GOLKOW TECHNOLOGIES, INC.
23 877.370.3377 ph | 917.591.5672 fax
24 deps@golkow.com

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<p>1 clear that he could continue to</p> <p>2 list articles that either --</p> <p>3 MR. MURPHY: Is that what</p> <p>4 you're telling him to do?</p> <p>5 MR. SLATER: No, I'm not and</p> <p>6 I can even say it outside -- I</p> <p>7 just want to make a record that</p> <p>8 you went to a new subject after</p> <p>9 you started to question about what</p> <p>10 articles talk about causation. I</p> <p>11 just want to make it clear that he</p> <p>12 wasn't asked are there any more</p> <p>13 you want to list.</p> <p>14 If you want to move to</p> <p>15 another subject, it's fine. I</p> <p>16 just don't want the record to seem</p> <p>17 as if he finished.</p> <p>18 MR. MURPHY: Oh, well, I</p> <p>19 thought you had. I thought that I</p> <p>20 had the four articles that spoke</p> <p>21 strongly and then we have</p> <p>22 Rubio-Tapia --</p> <p>23 THE WITNESS: That was not</p> <p>24 what I meant to convey. I think</p>	<p>1 A. I went on and listed Basson</p> <p>2 at some length, I think --</p> <p>3 Q. You listed Basson over here</p> <p>4 on the right.</p> <p>5 A. Why don't I take a look. If</p> <p>6 you really want every one of them, I must</p> <p>7 say it's becoming increasingly taken for</p> <p>8 granted, so it's often listed in the</p> <p>9 title. Indeed, if you look for the</p> <p>10 expression "olmesartan-induced</p> <p>11 enteropathy," that's popping up left and</p> <p>12 right in PubMed.</p> <p>13 Q. Just give me the list of the</p> <p>14 articles.</p> <p>15 A. Why don't I take a look.</p> <p>16 DeGaetani, did I mention</p> <p>17 that one yet?</p> <p>18 MR. SLATER: Not yet.</p> <p>19 THE WITNESS: Would you like</p> <p>20 me to go to the specific instance</p> <p>21 of where causation was either</p> <p>22 explicitly mentioned or at least</p> <p>23 strongly implied?</p> <p>24 MR. MURPHY: I'm just asking</p>
Page 131	Page 133
<p>1 we got --</p> <p>2 MR. MURPHY: My apologies.</p> <p>3 I would like for you to exhaust</p> <p>4 your list of articles that reached</p> <p>5 the conclusion that olmesartan</p> <p>6 causes sprue-like enteropathy.</p> <p>7 THE WITNESS: Can you read</p> <p>8 to me --</p> <p>9 MR. MURPHY: Thank you,</p> <p>10 Adam.</p> <p>11 THE WITNESS: Can you read</p> <p>12 to me the ones that I had</p> <p>13 mentioned already?</p> <p>14 MR. MURPHY: You had Talley,</p> <p>15 Lebwohl and --</p> <p>16 THE WITNESS: Ludvigsson.</p> <p>17 MR. MURPHY: -- correct --</p> <p>18 Marild and Lagana, Braunstein.</p> <p>19 THE WITNESS: I believe I</p> <p>20 mentioned some others. I</p> <p>21 mentioned Rubio-Tapia --</p> <p>22 BY MR. MURPHY:</p> <p>23 Q. Right. I'm saying before we</p> <p>24 got to Rubio --</p>	<p>1 for the titles of the articles.</p> <p>2 THE WITNESS: Okay.</p> <p>3 (Pause.)</p> <p>4 THE WITNESS: Aziz and</p> <p>5 colleagues interpret the initial</p> <p>6 Rubio-Tapia paper as indicating</p> <p>7 causation.</p> <p>8 (Pause.)</p> <p>9 THE WITNESS: I would argue</p> <p>10 that causation is strongly implied</p> <p>11 in the review article by Nina</p> <p>12 Burbure and colleagues,</p> <p>13 B-U-R-B-U-R-E.</p> <p>14 BY MR. MURPHY:</p> <p>15 Q. And you said, there, it's</p> <p>16 implied.</p> <p>17 A. Strongly implied.</p> <p>18 Q. Strongly implied.</p> <p>19 A. In the case described by de</p> <p>20 Fonseca, the title is "A case of</p> <p>21 olmesartan-induced enteropathy."</p> <p>22 I should also point out an</p> <p>23 item that's in my report, a table of</p> <p>24 causes of villous atrophy from the</p>

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<p style="text-align: right;">Page 134</p> <p>1 physician reference uptodate.com, I can 2 reference my report to where that is. 3 That is peer reviewed. It's not in 4 PubMed and it's a subscription service. 5 It's on page 9 of my report. Olmesartan 6 is listed as a cause of small intestinal 7 villous atrophy. 8 Q. That's not an article, is 9 it? That's just a chart. 10 MR. SLATER: Up-to-Date? 11 THE WITNESS: Well, I would 12 point out that it came from an 13 article in Up-to-Date. I did give 14 the caveat that it's not in 15 PubMed. It might not be widely 16 available to the general or 17 scientific public because it is 18 subscription. It's a subscription 19 service that is widely used by 20 physicians, certainly not 21 universally used, but it is a 22 peer-reviewed article. 23 MR. MURPHY: And that's what 24 I'm trying to understand.</p>	<p style="text-align: right;">Page 136</p> <p>1 potentially life-threatening 2 enteropathy with or without 3 villous atrophy." 4 Pardon me. Are we limiting 5 this to the peer-reviewed 6 literature or possibly internal 7 Daichi documents? 8 MR. MURPHY: Articles. I 9 asked you for the articles. 10 THE WITNESS: Just making 11 sure. 12 MR. MURPHY: Okay. 13 THE WITNESS: Philip and 14 colleagues, "Spectrum of 15 Drug-induced Chronic Diarrhea," 16 Journal of Clinical 17 Gastroenterology. 18 (Pause.) 19 THE WITNESS: Uehara and 20 colleagues, "Olmesartan-induced 21 Enteropathy Manifesting as 22 Wernicke-Korsakoff Syndrome." 23 BY MR. MURPHY: 24 Q. Before you identify the next</p>
<p style="text-align: right;">Page 135</p> <p>1 BY MR. MURPHY: 2 Q. And the title of the 3 article? 4 A. I don't have the title of 5 that article. 6 Q. Okay. All right. 7 A. On my person. 8 Q. We can move on. 9 (Pause.) 10 THE WITNESS: Marietta, 11 Cartee, Rishi, and Murray, 12 "Drug-induced enteropathy." 13 Marietta and colleagues, 14 "Immunopathogenesis of 15 olmesartan-associated 16 enteropathy," Alimentary 17 Pharmacology and Therapeutics, 18 2015. Marthey and colleagues, 19 "Olmesartan-associated 20 enteropathy: results of a national 21 survey," Alimentary Pharmacology 22 and Therapeutics, 2014: "In 23 conclusion, this study shows that 24 olmesartan causes severe and</p>	<p style="text-align: right;">Page 137</p> <p>1 article, I want to be sure that I 2 remember what you said earlier about 3 Uehara. That was one of the articles of 4 which you had not been aware at the time 5 you generated your report; correct? 6 A. I believe that either came 7 out later or only made its way to my 8 attention after I finished my report. 9 Q. Okay. I'm sorry. Go ahead. 10 A. Theophile and colleagues, 11 "Five cases of sprue-like enteropathy in 12 patients treated by olmesartan." 13 I should look at my 14 supplementary reliance list to make sure 15 that I'm being complete. I'm not sure if 16 everything in my binder here was on this 17 list, but based on the Uehara article, 18 that suggests that perhaps it is. 19 Did I mention Philip and 20 colleagues, "Spectrum of Drug-induced 21 Chronic Diarrhea"? 22 Q. You did. 23 A. Thank you. 24 How about Hammoudi and</p>

EXHIBIT 6

Protected Information - Jeffrey Warmke, Ph.D.

1 IN THE UNITED STATES DISTRICT COURT
2 FOR THE DISTRICT OF NEW JERSEY
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6 IN RE: BENICAR : MDL NO. 2606
7 (OLMESARTAN) PRODUCTS :
8 LIABILITY LITIGATION :
9 :

10 - - -
11 August 23, 2016
12 - - -

13 PROTECTED INFORMATION
14 - - -

15 Videotape Rule 30(b)(6)
16 deposition of DAIICHI SANKYO, INC., taken
17 through its representative JEFFREY
18 WARMKE, Ph.D., taken pursuant to notice,
19 was held at the law offices of Drinker
20 Biddle & Reath, LLP, 600 Campus Drive,
21 Florham Park, New Jersey, beginning at
22 9:32 a.m., on the above date, before
23 Kimberly A. Cahill, a Federally Approved
24 Registered Merit Reporter and Notary
 Public for the State of New Jersey.

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<p style="text-align: right;">Page 110</p> <p>1 protocol did not define asking specific 2 questions about any specific organ class 3 -- organ classes. 4 Q. The CRFs, the case report 5 forms, do not list anywhere to fill in 6 specific information about any 7 gastrointestinal-related side effects; 8 correct? 9 A. The case report forms 10 contain a place to report all reported 11 AEs. 12 Q. There's no place in the case 13 report forms that actually specifically 14 calls out gastrointestinal side effects 15 or related issues. That's not something 16 specifically asked for in the case report 17 form; correct? 18 A. Correct. 19 Q. The ROADMAP study was not 20 designed to study gastrointestinal side 21 effects of olmesartan; correct? 22 A. The primary endpoint of the 23 ROADMAP study was the prevention of 24 microalbuminuria. As part of the study,</p>	<p style="text-align: right;">Page 112</p> <p>1 effects? 2 A. No. Professor Haller was 3 clear that he received no communication 4 from Daiichi-Sankyo regarding the 5 potential for gastrointestinal side 6 effects up to and including the time he 7 wrote his letter to the Mayo Clinic. 8 Q. Did Professor Haller see any 9 patients who had gastrointestinal side 10 effects in his treatment of patients over 11 the years? Did you ask him that when you 12 met with him? 13 A. I did not ask him that 14 specific question. 15 Q. Did he tell you anything 16 along that line? 17 A. He did not volunteer that he 18 had personally witnessed any patients 19 taking olmesartan with gastrointestinal 20 side effects and, in fact, indicated that 21 based on his review of the safety data 22 throughout the course of the ROADMAP 23 study, there was never an issue raised 24 about gastrointestinal side effects by</p>
<p style="text-align: right;">Page 111</p> <p>1 all reported safe -- AEs were collected. 2 MR. SLATER: Move to strike 3 from "As" forward. 4 BY MR. SLATER: 5 Q. The ROADMAP study was not 6 designed to specifically study 7 gastrointestinal side effects of 8 olmesartan; correct? 9 A. Gastrointestinal events was 10 not one of the prespecified endpoints in 11 ROADMAP. 12 Q. And it -- gastrointestinal 13 side effects was not the primary 14 endpoint, obviously, and was not a 15 specifically called out secondary 16 endpoint; correct? 17 A. Gastrointestinal events was 18 not a predefined endpoint in the study. 19 Q. At any point, did anybody at 20 Daiichi-Sankyo inform Professor Haller or 21 any of the other investigators about 22 postmarketing adverse events that were 23 being received by the company in 24 connection with gastrointestinal side</p>	<p style="text-align: right;">Page 113</p> <p>1 the steering committee or by the data 2 safety monitoring committee. 3 Q. And just to be clear, there 4 was never a time where anyone from 5 Daiichi-Sankyo informed Professor Haller 6 or the other investigators or the 7 steering committee that reports were 8 coming in of gastrointestinal side 9 effects, some being categorized as celiac 10 disease during a period of time; that was 11 not -- that information was not provided 12 to them; correct? 13 A. As I said before, Professor 14 Haller indicated that he had not received 15 any communications from Daiichi-Sankyo 16 highlighting gastrointestinal side 17 effects. 18 Q. Would that hold true for the 19 steering committee as well and the other 20 investigators? 21 A. I did not interview all the 22 steering committee members during my 23 investigation, but Professor Haller 24 indicated that he had not been informed</p>

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<p style="text-align: right;">Page 270</p> <p>1 I'm not going to go through the whole 2 e-mail, but at the bottom of B, she says, 3 "It is almost impossible to design a 4 late-phase clinical trial with a proper 5 sample size that can detect all real 6 safety signals with conformity as 7 designed, one that can detect the real 8 signal for primary efficacy endpoint with 9 conformity." 10 Do you see what I just read? 11 A. Yeah, I see that sentence. 12 Q. And that's just a 13 statistical analysis of why it would be 14 that you wouldn't look to the data that 15 was supplied by the ROADMAP study to try 16 to determine whether there's an increased 17 risk of cardiac -- cardiovascular 18 mortality because it's just not what was 19 being looked at in this study. Right? 20 A. I'm going to have to defer 21 that question to the statistical expert. 22 Q. If you go to the very first 23 e-mail, the first page, there's an e-mail 24 now from Antonia Wang and she points out</p>	<p style="text-align: right;">Page 272</p> <p>1 OLM-DSI-0003999682, was marked for 2 identification.) 3 - - - 4 MR. PARKER: I want to take 5 a break. We've been going for 6 about an hour and 20 minutes. 7 MR. SLATER: Okay. 8 MR. PARKER: Okay? 9 THE VIDEO TECHNICIAN: The 10 time is 2:31 p.m. We are going 11 off the record. 12 (A recess was taken from 13 2:31 p.m. to 2:45 p.m.) 14 - - - 15 THE VIDEO TECHNICIAN: This 16 is DVD number 4. The time is 2:45 17 p.m. Back on the record. 18 BY MR. SLATER: 19 Q. I've handed you Exhibit 20 3035, which is some e-mails that address 21 in part the ROADMAP study. Do you see 22 that? 23 A. Yes, I see the e-mail. 24 Q. I'm going to just start</p>
<p style="text-align: right;">Page 271</p> <p>1 in part, the danger of conducting a small 2 study in this case for cardiovascular 3 event is seen all the time. She speaks 4 through it a little bit more and at the 5 end says, without proper preplanning and 6 appropriate sample size, we can get some 7 results that is inconclusive; correct? 8 A. Yes. 9 Q. And certainly there was no 10 effort to establish a sample size large 11 enough to study the question of 12 cardiovascular mortality. That's not 13 what the study was geared for. Right? 14 A. The ROADMAP study was sized 15 and powered to detect a 30 percent 16 difference in the occurrence of 17 microalbuminuria. It was not powered and 18 sized to detect a meaningful difference 19 in clinical outcomes. 20 - - - 21 (Deposition Exhibit No. 22 3035, 3/4-3/5/10 E-Mail Chain 23 Among Caspard, Cuprys, et al, 24 OLM-DSI-0003999681 and</p>	<p style="text-align: right;">Page 273</p> <p>1 right at the top of the first page, an 2 e-mail from Herve Caspard in 3 pharmacovigilance to Rich Cuprys and 4 Allen Feldman. 5 Do you see that e-mail at 6 the top? 7 A. Yes. 8 Q. Who's Rich Cuprys? 9 A. Rich Cuprys was in 10 regulatory affairs in the United States. 11 Q. Herve Caspard writes to him 12 and is talking about a slide presentation 13 and then says towards the bottom that 14 Bill Bailey -- and he's someone in 15 medical affairs; correct? 16 A. Yes. 17 Q. -- that Bill Bailey should 18 send me today market research data that 19 will likely be relevant, stressing that 20 the ROADMAP population is very different 21 from the general population treated with 22 olmesartan in the U.S. I would like to 23 consolidate this information in a backup 24 slide.</p>

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<p style="text-align: right;">Page 274</p> <p>1 Do you see that?</p> <p>2 A. Yes.</p> <p>3 Q. And that's a true statement</p> <p>4 that the ROADMAP population is very</p> <p>5 different from the general population</p> <p>6 treated with olmesartan in the United</p> <p>7 States; correct?</p> <p>8 A. Yeah, there are differences</p> <p>9 in the inclusion/exclusion criteria used</p> <p>10 for the study versus what the label</p> <p>11 indication would be, yes.</p> <p>12 - - -</p> <p>13 (Deposition Exhibit No.</p> <p>14 3036, 6/11/10 E-Mail from DSI</p> <p>15 Public Affairs to DaiichiSankyo -</p> <p>16 Development Division and</p> <p>17 DaiichiSankyo - Employees Only -</p> <p>18 Commercial, OLM-DSI-0003998943 and</p> <p>19 OLM-DSI-0003998944, was marked for</p> <p>20 identification.)</p> <p>21 - - -</p> <p>22 BY MR. SLATER:</p> <p>23 Q. I've handed you Exhibit</p> <p>24 3036, and this is a document that was</p>	<p style="text-align: right;">Page 276</p> <p>1 research and development, arm in the</p> <p>2 U.S.?</p> <p>3 A. Yes, the public affairs</p> <p>4 division for the U.S. organization.</p> <p>5 Q. And this is an internal</p> <p>6 communication circulated on behalf of Dr.</p> <p>7 Gormley, who is the president of</p> <p>8 Daiichi-Sankyo in the U.S.; correct?</p> <p>9 A. As noted in the signature</p> <p>10 line, at this particular time, Dr.</p> <p>11 Gormley was president of the development</p> <p>12 division, Daiichi-Sankyo pharma</p> <p>13 development, which is one of two</p> <p>14 divisions within DSI.</p> <p>15 Q. This is a response to a FDA</p> <p>16 drug safety communication that was coming</p> <p>17 out about the ROADMAP study and the</p> <p>18 ORIENT study; correct?</p> <p>19 A. Yes.</p> <p>20 Q. And it's pointing out that</p> <p>21 because the people taking Benicar in</p> <p>22 these studies had a higher rate of death</p> <p>23 from cardiovascular causes as compared to</p> <p>24 placebo, the FDA was looking at data;</p>
<p style="text-align: right;">Page 275</p> <p>1 circulated internally within your company</p> <p>2 June 11, 2010. Do you see that?</p> <p>3 A. Yes.</p> <p>4 Q. And it's written --</p> <p>5 rephrase.</p> <p>6 The document is circulated</p> <p>7 by DSI public affairs. And DSI, is that</p> <p>8 Daiichi-Sankyo Japan?</p> <p>9 A. No. In the United States,</p> <p>10 the legal organization for Daiichi is a</p> <p>11 holding company incorporated in Delaware</p> <p>12 DSUS, Daiichi-Sankyo U.S. An affiliate</p> <p>13 of DSUS or a subsidiary company of DSUS</p> <p>14 is Daiichi-Sankyo, Inc.</p> <p>15 Daiichi-Sankyo, Inc. is</p> <p>16 comprised of the R & D division based in</p> <p>17 Edison, New Jersey and the commercial</p> <p>18 division based in Parsippany, New Jersey.</p> <p>19 So DSI would be the company</p> <p>20 that includes the commercial organization</p> <p>21 and the R & D organization.</p> <p>22 Q. This document, Exhibit 3036,</p> <p>23 is circulated by DSI public affairs and</p> <p>24 that would be the commercial and R & D,</p>	<p style="text-align: right;">Page 277</p> <p>1 correct?</p> <p>2 A. That's correct.</p> <p>3 Q. In the second to last</p> <p>4 paragraph from the bottom, the last</p> <p>5 sentence says, both studies -- which</p> <p>6 would be ROADMAP and ORIENT; correct?</p> <p>7 A. Yes.</p> <p>8 Q. -- both studies had included</p> <p>9 exploratory secondary endpoints, but were</p> <p>10 not designed to make definitive</p> <p>11 conclusions beyond the primary endpoints.</p> <p>12 And that's a true statement;</p> <p>13 correct?</p> <p>14 A. Yes.</p> <p>15 - - -</p> <p>16 (Deposition Exhibit No.</p> <p>17 3037, 6/16/10 "Olmesartan</p> <p>18 Cardiovascular Safety" White Paper</p> <p>19 - FDA Regulatory Response,</p> <p>20 OLM-DSI-0011644249 through</p> <p>21 OLM-DSI-0011644324, was marked for</p> <p>22 identification.)</p> <p>23 - - -</p> <p>24 BY MR. SLATER:</p>

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<p style="text-align: right;">Page 278</p> <p>1 Q. That's Exhibit 3037. 2 Exhibit 3037 is a report titled "White 3 Paper - FDA Regulatory Response" dated 4 June 16, 2010; correct? 5 A. Yes. 6 Q. And if I understand 7 correctly, this was a response to the 8 FDA's inquiries about the increased rates 9 of cardiovascular mortality in the 10 ROADMAP and ORIENT studies? 11 A. Correct. 12 Q. And this constituted your 13 company's position with regard to those 14 findings and this is what you told the 15 FDA; correct? 16 A. Yes. 17 Q. It was signed by Glenn 18 Gormley, the chief scientific officer and 19 president of the company; correct? 20 A. Yes. 21 Q. And Kazunori Hirokawa was 22 also a signatory to this report. He's 23 the global head of the research and 24 development unit?</p>	<p style="text-align: right;">Page 280</p> <p>1 Q. It says: Neither study was 2 designed -- rephrase. 3 In the second paragraph of 4 the introduction on page 11, the second 5 sentence says: Neither study was 6 designed nor appropriately sized to 7 constitute an adequate test of a safety 8 or efficacy hypothesis related to 9 cardiovascular morbidity or mortality; 10 correct? 11 A. Yes. 12 Q. And that's a true statement; 13 correct? 14 A. Yes. 15 Q. And that would be a true 16 statement with regard to any of the 17 secondary endpoints; correct? 18 A. Yes. 19 Q. This also indicates that 20 there was -- rephrase. 21 This also indicates that in 22 the ROADMAP study, a large percentage of 23 patients had frank study 24 discontinuations, 1,025 patients, as well</p>
<p style="text-align: right;">Page 279</p> <p>1 A. That's correct. 2 Q. This would be someone who 3 works in Japan? 4 A. Yes. 5 Q. If you go to page 10, 6 there's the introduction? 7 A. Yes. 8 Q. And if you go -- rephrase. 9 Please go to page 11, the carry-over page 10 of the introduction, the first -- the 11 second full paragraph. It indicates that 12 it's Daiichi-Sankyo's position that based 13 on the designs, sample sizes, and numbers 14 of incident events in the ROADMAP and 15 ORIENT studies, conclusions about the 16 effects of olmesartan on cardiovascular 17 mortality support a play of chance. 18 When it says a play of 19 chance, just meaning that they're 20 basically chance findings because of the 21 statistical status of the studies? 22 A. A chance finding due to the 23 small number of events observed in each 24 study.</p>	<p style="text-align: right;">Page 281</p> <p>1 as protocol-driven discontinuations. 2 Right? 3 A. Yes. 4 Q. And thus only 68 percent of 5 randomized patients completed the study 6 while receiving double-blind study 7 medication; correct? 8 A. Correct. 9 Q. And these are reasons being 10 stated as to why the cardiovascular 11 mortality figures should not be 12 determinative of the risk/benefit 13 profile. That's what's being advocated 14 here; correct? 15 A. At the outset, the study was 16 not properly sized for a -- to adequately 17 test those endpoints. Furthermore, the 18 dropouts and discontinuations reduced the 19 available sample size, yes. 20 Q. At the very end of this 21 section, it says that while 22 Daiichi-Sankyo acknowledges the increase 23 in cardiovascular mortality in these 24 studies, the observations are considered</p>

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<p style="text-align: right;">Page 282</p> <p>1 to be chance findings that do not warrant 2 any modification to the current 3 olmesartan label. 4 That's the ultimate 5 conclusion. We don't need to provide any 6 further warnings or information in the 7 label, that's what this says. Right? 8 A. That is the company's 9 position through this white paper, yes. 10 Q. If they were -- rephrase. 11 If there was a safety endpoint that was 12 studied and not a chance finding then -- 13 and it did show an increase in a side 14 effect for the olmesartan arm, then it 15 could warrant a modification to the 16 label. 17 A. You're asking me to answer a 18 hypothetical. 19 Q. Okay. 20 Go to page 57, please. 21 A. (Witness complies.) 22 Q. This is further analysis of 23 the study and it talks about the ROADMAP 24 study design. Do you see that? 6.1?</p>	<p style="text-align: right;">Page 284</p> <p>1 incidence of microalbuminuria. 2 Q. If you could go to page 58, 3 please, the second to the last long 4 paragraph, at the very end of that 5 paragraph, it says: In sum -- the 6 cardiovascular -- 7 A. I'm sorry. Page 58? 8 Q. I'll start over. If you 9 just go over to page 58 -- 10 A. I've got it. Okay. 11 Q. -- the next page discussing 12 the ROADMAP study design, it talks about 13 the fact that the double-blind period 14 only had a 68 percent completion rate and 15 there was only a 75 percent completion 16 rate for the overall study; correct? 17 A. Yes. 18 Q. And it says, "Thus, 19 information on vital and clinical status 20 at the end of the study is not available 21 for a full 25% of randomized patients." 22 And that's a true statement. 23 Right? 24 A. Yes.</p>
<p style="text-align: right;">Page 283</p> <p>1 A. Yes. 2 Q. About five lines down, it 3 says, "This was an event-driven study." 4 What does that mean? 5 A. This was a prevention study. 6 The event that was driving the study was 7 the occurrence of microalbuminuria. 8 Q. And then if you go down 9 another few sentences, it says, "ROADMAP 10 was neither designed nor adequately sized 11 as a clinical outcome study." 12 What does that mean? 13 A. In this case, the outcome is 14 referring to hard clinical outcomes, like 15 mortality, and so the study wasn't sized 16 to measure differences in mortality 17 between the two treatment groups. 18 Q. It wasn't sized or designed 19 to study mortality and morbidity or 20 anything other than the primary endpoint; 21 correct? 22 A. The sample size and the 23 conduct of the trial was designed to 24 answer the question about the first</p>	<p style="text-align: right;">Page 285</p> <p>1 Q. And it says, "This made 2 accurate Kaplan-Meier estimates of 3 cumulative event rates impossible." 4 That's statistical speak, but essentially 5 saying that a certain analysis could not 6 be performed. 7 A. That is the conclusion that 8 was reached in the white paper, yes. 9 - - - 10 (Deposition Exhibit No. 11 3038, 12/10/09 E-Mail Chain Among 12 Chavanu, Jaffe, et al, 13 OLM-DSI-0008208021 through 14 OLM-DSI-0008208024, was marked for 15 identification.) 16 - - - 17 BY MR. SLATER: 18 Q. I've handed you Exhibit 19 3038, which is a chain of e-mails in 20 December of 2009 -- December 10, 2009 to 21 be precise -- do you see that? 22 A. Uh-hum. 23 Q. If you go to the third page 24 of this e-mail chain, I want to start</p>

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<p style="text-align: right;">Page 326</p> <p>1 discussions about the contents of the 2 actual article. Right?</p> <p>3 A. As we saw earlier, yes, the 4 biostatisticians at Daiichi-Sankyo 5 provided comments to Dr. Haller on the 6 manuscript.</p> <p>7 Q. Discussions that Professor 8 Haller did not disclose to you when you 9 met with him and spoke to him for five or 10 six hours. Right?</p> <p>11 A. There were discussions that 12 Daiichi-Sankyo provided comments on the 13 manuscript, but it was at the discretion 14 of the steering committee what to accept 15 and what to not accept.</p> <p>16 MR. SLATER: Move to strike 17 from "but" forward.</p> <p>18 BY MR. SLATER:</p> <p>19 Q. When you spoke to Dr. -- 20 Professor Haller for six hours or 21 whatever it was, asked him about this 22 process, he never disclosed to you the 23 things I showed you in those e-mails a 24 few minutes ago, the fact that people at</p>	<p style="text-align: right;">Page 328</p> <p>1 you'll see was a patient that was 2 actually in the ROADMAP study.</p> <p>3 Do you see that?</p> <p>4 A. Yes.</p> <p>5 Q. And I can tell you, we've 6 confirmed -- and if you want to reconfirm 7 for yourself, you can -- that this person 8 was in the olmesartan arm. You can take 9 my word for it or you can confirm it 10 yourself if you want to.</p> <p>11 A. Okay.</p> <p>12 Q. Now, this patient, it 13 indicates, was a 56-year-old woman who 14 was hospitalized due to gastroenteritis 15 and hypokalemia.</p> <p>16 Do you see that in the 17 narrative section?</p> <p>18 A. Where in the narrative 19 section are you looking?</p> <p>20 Q. B 5 --</p> <p>21 A. B 5, okay.</p> <p>22 Q. -- the box that says 23 "Describe Event or Problem"? 24 A. Uh-hum.</p>
<p style="text-align: right;">Page 327</p> <p>1 the company saw them as negotiating with 2 him and they were pressuring him to try 3 to make changes, he didn't disclose that 4 to you; correct?</p> <p>5 A. There were discussions that 6 comments came from Daiichi-Sankyo, but 7 that it was at his discretion and the 8 steering committee's discretion about 9 which comments to accept and which not to 10 accept.</p> <p>11 MR. SLATER: Move to strike. 12 - - - 13 (Deposition Exhibit No. 14 3047, 10/13/15 MedWatch Report for 15 Mfr Report# SP-2006-003369, 16 OLM-DSI-0004767148-R through 17 OLM-DSI-0004767153-R, was marked 18 for identification.) 19 - - -</p> <p>20 BY MR. SLATER:</p> <p>21 Q. I've just handed you Exhibit 22 3047. And this is a MedWatch report for 23 a patient who, if you look at the 24 narrative section, box B 5 on the left,</p>	<p style="text-align: right;">Page 329</p> <p>1 Q. And then if you turn to the 2 second page, there's a continuation of 3 that section. At the very top, it 4 indicates in part that the patient was in 5 the active trial phase when the serious 6 adverse event occurred.</p> <p>7 Do you see that at the very 8 top of the first line?</p> <p>9 A. Yes, yes.</p> <p>10 Q. The second paragraph 11 indicates that on November 1, 2006, the 12 patient developed gastroenteritis with 13 hypokalemia. The treatment was 14 discontinued on November 6, 2006 and the 15 patient was hospitalized on November 17.</p> <p>16 Further down, it indicates 17 the patient was released on November 28, 18 2006 from the hospital and all symptoms 19 ended on December 1, 2006.</p> <p>20 Do you see that?</p> <p>21 A. Yes.</p> <p>22 Q. Then if you go down to the 23 middle, there's a follow-up note, March 24 26, 2007. Do you see that, middle of the</p>

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<p style="text-align: right;">Page 330</p> <p>1 page?</p> <p>2 A. Uh-hum.</p> <p>3 Q. It indicates:</p> <p>4 Gastroenteritis disappeared and</p> <p>5 reappeared when study drug was</p> <p>6 reintroduced on the 3rd of December 2006.</p> <p>7 The patient finally stopped intake of</p> <p>8 study medication on 24 December 2006;</p> <p>9 therefore, the investigator assessed a</p> <p>10 causal relationship as probable.</p> <p>11 And he says: The</p> <p>12 investigator considered hypokalemia as</p> <p>13 clearly related to dehydration due to</p> <p>14 gastroenteritis.</p> <p>15 Do you see that?</p> <p>16 A. Yes.</p> <p>17 Q. And then if you go down,</p> <p>18 there's further follow-up information,</p> <p>19 July 10, 2009. It says: Serious adverse</p> <p>20 event term was completed with</p> <p>21 hypocalcemia unrelated to study</p> <p>22 medication. The patient was released</p> <p>23 from hospital on December 5, 2006 and</p> <p>24 fully recovered on 31 January 2007.</p>	<p style="text-align: right;">Page 332</p> <p>1 October 2009, the reporter's causality</p> <p>2 assessment remains unchanged as probably</p> <p>3 related for the event hospitalization</p> <p>4 because of gastroenteritis.</p> <p>5 And then it says further</p> <p>6 down, the company's causality assessment</p> <p>7 remains unchanged as related for the</p> <p>8 event hospitalization because of</p> <p>9 gastroenteritis.</p> <p>10 Do you see that?</p> <p>11 A. Yes.</p> <p>12 Q. Now, first of all, the</p> <p>13 coding on this, even though this person</p> <p>14 was hospitalized because of -- rephrase.</p> <p>15 When you look at the coding,</p> <p>16 it does not indicate diarrhea and</p> <p>17 vomiting even though that is referenced</p> <p>18 in the narrative; correct?</p> <p>19 MR. PARKER: Objection. Now</p> <p>20 we're getting beyond the scope of</p> <p>21 the notice.</p> <p>22 MR. SLATER: I don't think</p> <p>23 we are. We're talking about the</p> <p>24 data they reported. Now we're</p>
<p style="text-align: right;">Page 331</p> <p>1 Study medication was finally discontinued</p> <p>2 due to adverse events, diarrhea, and</p> <p>3 vomiting on 30 December 2006.</p> <p>4 Do you see that?</p> <p>5 A. Yes.</p> <p>6 Q. And then if you go to the</p> <p>7 bottom, there's assessments and it says,</p> <p>8 at that point causal relationship -- let</p> <p>9 me withdraw that. Let me move to the</p> <p>10 other thing I wanted to show you. One</p> <p>11 second.</p> <p>12 All right. Go now to page</p> <p>13 3. And there's a follow-up due to a</p> <p>14 quality control check on August 7, 2009</p> <p>15 which indicates, relationship of the</p> <p>16 event, hospitalization because of</p> <p>17 gastroenteritis, was corrected to</p> <p>18 probably.</p> <p>19 And -- you see that. Right?</p> <p>20 A. Yes.</p> <p>21 Q. Let's go to the very -- page</p> <p>22 4, the end of all these updates, the last</p> <p>23 one: Based on follow-up -- final</p> <p>24 follow-up information received on 21</p>	<p style="text-align: right;">Page 333</p> <p>1 going into the core data. This is</p> <p>2 the source documents.</p> <p>3 MR. PARKER: I'm not going</p> <p>4 to argue. I'm just making a</p> <p>5 statement for the record.</p> <p>6 MR. SLATER: All right.</p> <p>7 BY MR. SLATER:</p> <p>8 Q. You see that this patient</p> <p>9 had its -- had the study medication</p> <p>10 discontinued due to adverse events</p> <p>11 diarrhea and vomiting on 30 December</p> <p>12 2006, but diarrhea and vomiting are not</p> <p>13 coded adverse event terms on the MedWatch</p> <p>14 form; correct?</p> <p>15 A. Correct.</p> <p>16 Q. We also know this patient</p> <p>17 was being given olmesartan and had a</p> <p>18 successful dechallenge and then a</p> <p>19 positive rechallenge: When the person</p> <p>20 went back on the drug, the symptoms came</p> <p>21 back. That's documented in this form.</p> <p>22 So certainly your company</p> <p>23 had this information available to it;</p> <p>24 correct?</p>

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<p style="text-align: right;">Page 334</p> <p>1 MR. PARKER: Objection as to 2 form. 3 THE WITNESS: The 4 information is contained on the 5 MedWatch form, yes. 6 BY MR. SLATER: 7 Q. Okay. 8 So your company knew that a 9 patient that was actually being given 10 olmesartan during the ROADMAP study 11 developed gastroenteritis, vomiting, and 12 diarrhea so severe that she was 13 hospitalized. When she went off 14 olmesartan, she got better. When she 15 went back on it, she got sick again. 16 So your company had 17 firsthand information from a study it was 18 conducting that olmesartan likely caused 19 these symptoms; correct? 20 MR. PARKER: Objection as to 21 form. 22 THE WITNESS: The company 23 had the information as reported on 24 the MedWatch form, yes.</p>	<p style="text-align: right;">Page 336</p> <p>1 identification.) 2 - - - 3 MR. SLATER: Everybody else? 4 Spicolli fans? 5 MR. PARKER: I have no idea 6 what you're talking about. 7 MR. SLATER: That's 8 unfortunate. 9 MR. PARKER: Okay. 10 MR. SLATER: We're going to 11 have a screening together, all of 12 us, both firms -- 13 MR. PARKER: Ridgmont High. 14 MR. SLATER: -- all the 15 firms -- Fast Times At Ridgmont 16 High. 17 MR. PARKER: Okay. 18 MR. SLATER: Sean Penn's 19 first major role. 20 MR. PARKER: He's not one of 21 my favorite actors. 22 MR. SLATER: You'll like him 23 in this role. It'll loosen you 24 up, Bruce.</p>
<p style="text-align: right;">Page 335</p> <p>1 MR. SLATER: You can put 2 that one down. I'm trying to get 3 to the part of the day where we 4 get you home for dinner. Let me 5 just make one note. 6 (Pause.) 7 MR. SLATER: Do you watch 8 Fast Times At Ridgmont High? 9 THE WITNESS: A long time 10 ago. 11 MR. SLATER: You know when 12 he says, like, this new schedule 13 is so confusing? All this paper 14 is so confusing. 15 I got a smile out of you. I 16 knew I could get that. Nobody can 17 keep a straight face when you make 18 a Spicolli reference. 19 - - - 20 (Deposition Exhibit No. 21 3048, 5/13/16 MedWatch Report for 22 Mfr Report# DSM-2008-01071, 23 OLM-DSI-0015261736 through 24 OLM-DSI-0015261739, was marked for</p>	<p style="text-align: right;">Page 337</p> <p>1 BY MR. SLATER: 2 Q. Okay. I've handed you 3 Exhibit 3048, which is a MedWatch form 4 for a patient who you can see, if you 5 look in box B 5, was a ROADMAP patient. 6 Do you see that? 7 A. B 5, yes. 8 Q. And I can represent to you 9 that we determined this patient was in 10 the olmesartan arm of the study. You can 11 accept that or, if you need to check it, 12 you certainly can. 13 A. Okay. 14 Q. This patient that's 15 described here was a 60-year-old woman 16 who was, according to this, hospitalized 17 due to acute prerenal failure and was in 18 active trial phase when the adverse event 19 occurred. That's what it says on the 20 first page. 21 Do you see that? 22 A. Yes. 23 Q. Go to the second page, 24 please. The second paragraph of the</p>

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<p style="text-align: right;">Page 362</p> <p>1 exists. Right?</p> <p>2 A. No, I do not.</p> <p>3 Q. The reason it matters is</p> <p>4 this -- well, I'll get to it.</p> <p>5 Whatever it says in this</p> <p>6 letter to the editor, I'm not going to</p> <p>7 walk through the whole letter, he was</p> <p>8 doing a statistical analysis based on a</p> <p>9 comparison of the two arms of the study;</p> <p>10 correct -- well, let me actually ask it</p> <p>11 differently.</p> <p>12 What Professor Haller and</p> <p>13 Menne did in this letter is, they talked</p> <p>14 about going back and looking at the data</p> <p>15 to see if there were intestinal effects</p> <p>16 in either arm and what was found;</p> <p>17 correct?</p> <p>18 A. He was looking for a</p> <p>19 difference of incidence of GI AEs between</p> <p>20 the treatment group and the placebo</p> <p>21 group.</p> <p>22 Q. That was not a subject that</p> <p>23 was studied, correct, specifically? It</p> <p>24 wasn't an endpoint at all; correct?</p>	<p style="text-align: right;">Page 364</p> <p>1 Q. Nowhere in this letter to</p> <p>2 the editor to the Mayo Clinic does Dr.</p> <p>3 Menne or Dr. Haller talk about any of the</p> <p>4 olmesartan side patients who I showed you</p> <p>5 today their documentation; that's not</p> <p>6 discussed here at all. Right?</p> <p>7 MR. PARKER: Objection.</p> <p>8 MR. SLATER: Let me ask it</p> <p>9 differently.</p> <p>10 BY MR. SLATER:</p> <p>11 Q. The specifics of patients</p> <p>12 who developed or were documented to</p> <p>13 develop gastrointestinal effects, that's</p> <p>14 not discussed in detail here. Right?</p> <p>15 A. The specifics of patients</p> <p>16 who developed gastrointestinal AEs in</p> <p>17 either the olmesartan or the placebo</p> <p>18 group are not described here.</p> <p>19 MR. SLATER: Let's go off</p> <p>20 the video for a second.</p> <p>21 THE VIDEO TECHNICIAN: Sure.</p> <p>22 The time is 4:31 p.m. Off the</p> <p>23 record.</p> <p>24 - - -</p>
<p style="text-align: right;">Page 363</p> <p>1 A. It was not a predefined</p> <p>2 endpoint.</p> <p>3 Q. The study was not powered to</p> <p>4 evaluate that question. Right?</p> <p>5 A. That's correct.</p> <p>6 Q. And, in fact, we went</p> <p>7 through some language in the context of</p> <p>8 the cardiovascular mortality issue where</p> <p>9 Glenn Gormley in a white paper and in an</p> <p>10 internal document actually talked about</p> <p>11 the fact that you can't draw definitive</p> <p>12 conclusions about that secondary endpoint</p> <p>13 because of the way the study was</p> <p>14 designed. It just -- it's not set up to</p> <p>15 study that issue.</p> <p>16 The same would hold true for</p> <p>17 gastrointestinal effects probably even to</p> <p>18 a larger extent. Right?</p> <p>19 MR. PARKER: Objection;</p> <p>20 form.</p> <p>21 THE WITNESS: There was not</p> <p>22 a prespecified endpoint for GI AEs</p> <p>23 in the study, that's correct.</p> <p>24 BY MR. SLATER:</p>	<p style="text-align: right;">Page 365</p> <p>1 (A discussion off the record</p> <p>2 occurred.)</p> <p>3 - - -</p> <p>4 THE VIDEO TECHNICIAN: The</p> <p>5 time is 4:41 p.m. Back on the</p> <p>6 record.</p> <p>7 - - -</p> <p>8 EXAMINATION</p> <p>9 - - -</p> <p>10 BY MR. PARKER:</p> <p>11 Q. Dr. Warmke, good afternoon.</p> <p>12 It's now 20 to 5:00. It's been a long</p> <p>13 day, but I have a few questions I need to</p> <p>14 ask you to address some of the issues</p> <p>15 that Mr. Slater reviewed with you today</p> <p>16 during the course of your deposition.</p> <p>17 Okay?</p> <p>18 A. Okay.</p> <p>19 Q. Let's begin where we started</p> <p>20 today with your qualifications; and I'm</p> <p>21 not going to repeat anything that's been</p> <p>22 said, but tell the jury what experience</p> <p>23 you have professionally with clinical</p> <p>24 trial.</p>